REMARKS

This Application has been carefully reviewed in light of the Office Action dated February 20, 2008 (*"Office Action"*). Applicants note with appreciation the Examiner's acceptance of the drawings. At the time of the Office Action, Claims 1-23 were pending in the application and the Examiner rejects Claims 1-23. In this Response to Office Action, Applicants amend Claims 1, 7, 12, and 18. Applicants add new Claim 24. Applicants submit that no new matter has been added with these amendments. Applicants respectfully request reconsideration and favorable action in this case.

Objections to the Specification

The Examiner objects to the Specification as failing to provide proper antecedent basis for the claimed subject matter. Specifically, the Examiner states that "[t]here is no disclosure in the specification of a computer-readable medium," as recited in independent Claims 12 and 18. (*Office Action*, page 2).

Applicants note that the terminology to which the Examiner objects (i.e., "computer-readable medium) is language that was present in Claims 12 and 18 as originally filed. With regard to original claims, the M.P.E.P. states:

> In establishing a disclosure, applicant may rely not only on the description and drawing as filed but also on the original claims if their content justifies it.
>
> Where subject matter not shown in the drawing or described in the description is claimed in the application as filed, and such original claim itself constitutes a clear disclosure of this subject matter, then the claim should be treated on its merits, and requirement made to amend the drawing and description to show this subject matter.

(M.P.E.P. 60801(l)). Thus, the M.P.E.P. indicates that language in the claims is self-supported. Although Applicants disagree with the Examiner's determination that Applicants' disclosure does not provide clear disclosure of the claimed subject matter (*See,* Applicants' Specification, page 7, lines 15-17), Applicants have amended the Specification to more clearly disclose the claimed subject matter. Specifically, Applicants have amended the paragraph beginning "Drawing application 21 is a computer program . . ." on page 7 of the

Specification to clarify that drawing application 21 "may reside in any computer-readable storage medium, such as memory 20 or database 23."

For at least these reasons, Applicants respectfully request that the objection to the Specification be withdrawn.

Section 112 Rejections

The Examiner rejects Claims 1-23 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. According to the Examiner, the claims "contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention." (*Office Action*, page 3). Without conceding the veracity of the rejection and solely to advance prosecution of this case, Applicants have amended Claims 1, 7, 12, and 18 to remove the previously added language reciting that the converting step is performed "if and only if" a P x 1 surface condition is determined.

For at least these reasons, Applicants respectfully request that the 35 U.S.C. § 112, first paragraph rejection of Claims 1-23 be withdrawn.

Section 102 Rejections

The Examiner rejects Claim 1 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,345,546 issued to Harada et al. ("*Harada*"). Because *Harada* does not disclose, teach, or suggest each and every feature of Applicants' Claim 1, Applicants respectfully traverse the rejection of Claim 1 and requests reconsideration and favorable action.

Independent Claim 1 of the present Application, as amended, recites:

> A method for interfacing with a surface within a computer-aided drawing environment, comprising:
> determining that a plurality of curves operable to define a surface plane constitute a P x 1 surface condition, a P x 1 surface

condition being defined by a number of first curves equal to P and only one second curve, wherein P is an integer greater than zero;

in response to determining that a plurality of curves constitute a P x 1 surface condition, converting the P x 1 surface condition into an N x M surface condition, an N x M surface condition being defined by a number of third curves equal to N and a number of fourth curves equal to M, wherein N and M are integers greater than one, the third and fourth curves mathematically filling the space of the surface plane defined by the first curves and the only one second curve;

constructing an N x M surface under the N x M surface condition; and

modifying the N x M surface to edit a drawing.

Applicants respectfully submit that *Harada* does not disclose, either expressly or inherently, each and every claim element recited in Applicants' Claim 1.[1]

For example, *Harada* does not disclose, teach, or suggest "converting the P x 1 surface condition into an N x M surface condition, an N x M surface condition being defined by a number of third curves equal to N and a number of fourth curves equal to M, wherein N and M are integers greater than one, the third and fourth curves mathematically filling the space of the surface plane defined by the first curves and the only one second curve," as recited in Claim 1. Rather, *Harada* discloses "a method for generating a fillet surface which smoothly connects two surfaces to each other." (Column 2, lines 31-36). Specifically, the method includes inter alia "designating a spine curve near a boundary between the surfaces" and "generating a Gregory patch which approximately and parametrically represents the filler surface." (Column 21, lines 34-46). Thus, *Harada* discloses creating a third, fillet surface for connecting two adjacent surfaces.

As disclosed in *Harada*, the fillet surface is formed by "placing a predetermined curve on a normal plane of the spine curve at an arbitrary point on the spine curve so that the predetermined curve can be in contact with the two surfaces." (Figures 3A-3F; Column 2,

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[1] "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. In addition, "[t]he identical invention <u>must</u> be shown in as complete detail as is contained in the . . . claims" and "[t]he elements <u>must</u> be arranged as required by the claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); MPEP § 2131 (*emphasis added*).

lines 18-21). *Harada* then discloses "sliding the predetermined curve, while being in contact with the two surfaces, in order to generate trajectories of two tangent points between the predetermined curve and the two surfaces." (Figures 3A-3F; Column 2, lines 21-25). Thus, the fillet surface "being defined by a trajectory of the predetermined curve and the trajectories of the two tangent points" comprises a third surface that connects the first two surfaces. The surface plane of the fillet surface is different than either of the surface planes defined by the original two surfaces. (Figures 3A-3F and 5A-5D; Column 2, lines 25-27). Accordingly, the predetermined curve and the trajectory curves forming the fillet surface are not analogous to "a number of third curves equal to N and a number of fourth curves equal to M . . . mathematically filling the space of the surface plane defined by the first curves and the only one second curve," as recited in Claim 1.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claim 1, together with Claims 2-6 that depend from Claim 1.

Section 103 Rejections

The Examiner rejects Claims 2-23 under 35 U.S.C. § 103(a) as being unpatentable over *Harada* in view of U.S. Patent No. 5,619,625 issued to Konno et al. ("*Konno*").

A.   The Claims are Allowable over the cited References

Because the proposed *Harada-Konno* combination does not disclose, teach, or suggest each and every feature of Applicant's Claims 2-23, Applicants respe ctfully traverse the rejection of Claims 2-23 and requests reconsideration and favorable action.

1.   Claims 2-6

Dependent Claims 2-6 depend from independent Claim 1. These dependent claims are not rendered obvious by the *Harada-Konno* combination proposed by the Examiner because they include the limitations of their respective base claim, which Applicants have shown above to be allowable. Since Claims 2-6 incorporate the limitations of Claim 1, Applicants have not provided detailed arguments with respect to Claims 2-6. However,

Applicants remain ready to do so if it becomes appropriate. Applicants respectfully request reconsideration and allowance of Claims 2-6.

For at least these reasons, Applicants respectfully request reconsideration and allowance of dependent Claims 2-6.

2. Claims 7-11

Independent Claim 7 of the present Application, as amended, recites:

> A method for interfacing with a surface within a computer-aided drawing environment, comprising:
> determining that a plurality of curves operable to define the surface constitute a P x 1 surface condition, a P x 1 surface condition being defined by a number of first curves equal to P and only one second curve, wherein P is an integer greater than zero;
> in response to determining that a plurality of curves constitute a P x 1 surface condition, converting the P x 1 surface condition into an N x M surface condition by generating at least one auxiliary curve that is substantially continuous with any adjoining surfaces of a surface having the P x 1 surface condition and compatible with the number of first curves and the only one second curve that define the P x 1 surface condition, an N x M surface condition being defined by a number of third curves equal to N and a number of fourth curves equal to M, wherein N and M are integers greater than one, wherein each of the third and fourth curves are of the same mathematical degree as the first and second curves to be compatible with the first and second curves;
> constructing an N x M surface under the N x M surface condition; and
> modifying the N x M surface to edit a drawing.

Applicants respectfully submit that the proposed *Harada-Konno* combination does not disclose, teach, or suggest the combination of elements recited in Applicants' independent Claim 7.

For example, the proposed *Harada-Konno* combination does not disclose, teach, or suggest "converting the P x 1 surface condition into an N x M surface condition . . . defined by a number of third curves equal to N and a number of fourth curves equal to M . . . wherein each of the third and fourth curves are of the same mathematical degree as the first and

second curves to be compatible with the first and second curves," as recited in Claim 7. In the *Office Action*, the Examiner identifies *Harada* as disclosing the "converting of a P x 1 surface condition into an N x M surface condition by generating at least one auxiliary curve" but relies on *Konno* for disclosure that the auxiliary curve is "compatible with the number of first curves and the only one second curve that define the P x 1 surface condition." (*Office Action*, pages 5-6). Applicants respectively submit, however, that neither of *Harada* nor *Konno* disclose, teach, or suggest that "each of the third and fourth curves are of the same mathematical degree as the first and second curves to be compatible with the first and second curves," as recited in Claim 7.

As discussed above with regard to Claim 1, *Harada* merely discloses "a method for generating a fillet surface which smoothly connects two surfaces to each other." (Column 2, lines 31-36). Thus, *Harada* discloses creating a third, fillet surface for connecting two adjacent surfaces. As disclosed in *Harada*, the fillet surface is formed by "placing a predetermined curve on a normal plane of the spine curve at an arbitrary point on the spine curve so that the predetermined curve can be in contact with the two surfaces." (Figures 3A-3F; Column 2, lines 18-21). *Harada* then discloses "sliding the predetermined curve, while being in contact with the two surfaces, in order to generate trajectories of two tangent points between the predetermined curve and the two surfaces." (Figures 3A-3F; Column 2, lines 21-25). There is no disclosure in *Harada* that the predetermined curve or the trajectory curves are of the same mathematical degree" as the curves of either of the two surfaces. Accordingly, *Harada* does not disclose, teach, or suggest "converting the P x 1 surface condition into an N x M surface condition. . . defined by a number of third curves equal to N and a number of fourth curves equal to M . . . wherein each of the third and fourth curves are of the same mathematical degree as the first and second curves to be compatible with the first and second curves," as recited in Claim 7.

Konno does not cure the deficiencies identified above. *Konno* discloses a surface generation method "which smoothly joins two surface patches sharing a common boundary curve." (Column 2, lines 32-35). Specifically, *Konno* discloses "calculating cross boundary derivatives on all the boundary curves forming a face" and "creating the control points of a polynomial surface by using the cross boundary derivatives." (Abstract). Although *Konno*

discloses "checking G1 continuity at the end points of the boundary curve" and "using the condition of continuity [in calculating the cross boundary derivatives]" (Column 5, lines 23-26 and 41-44), Applicants respectfully submit that continuity is not analogous to compatibility. Even if cross boundary derivatives are generated having a condition of continuity in *Konno*, there is no disclosure in *Konno* of that the cross boundary derivatives "are of the same mathematical degree" as boundary curves or any other curves forming a face.

Likewise, the mere disclosure in *Konno* of "determining whether the boundary curve is a polynomial curve or not" and "calculating the cross boundary derivatives by using the control points of" the boundary curve is not analogous to Applicants' recited claim language. (Column 5, lines 32-34 and 41-44). Even if the boundary curve is a polynomial and the cross boundary derivatives are polynomials, there is no disclosure in *Konno* that the polynomials "are of the same mathematical degree," as recited in Applicants' Claim 7. There is no disclosure in *Konno* that the control points and weights of a curve are analogous or otherwise indicative of the degree of the curve, as would be required to read on Applicants' claim language. Additionally, Applicants note that the Examiner's citation of Column 11, lines 56-65 of *Konno*. However, the cited section merely states that "[i]f the number of [cross boundary derivatives] is not four, the face is not quadrilateral and should be divided . . . into a plurality of quadrilateral faces . . ." (Column 11, lines 56-65). Thus, *Konno* merely indicates that a quadrilateral face is desired and that four cross boundary derivatives is indicative of a quadrilateral face. However, the number of cross boundary derivatives used to smoothly connect to faces is not indicative of the degree of the curves. Accordingly, there is no disclosure in *Konno* of "converting the P x 1 surface condition into an N x M surface condition . . . defined by a number of third curves equal to N and a number of fourth curves equal to M . . . wherein each of the third and fourth curves are of the same mathematical degree as the first and second curves to be compatible with the first and second curves," as recited in Claim 7.

For at least these reasons, Applicants respectfully request reconsideration and allowance of independent Claim 7, together with Claims 8-13 that depend on Claim 7.

3.   Claims 12-23

Independent Claims 12 and 18 include certain features and operations that are analogous to the features and operations recited in Claim 1, discussed above. For example, Claim 12 recites "a software program stored on a computer readable medium and operable, when executed on a processor, to . . . convert the P x 1 surface condition into an N x M surface condition, an N x M surface condition being defined by a number of third curves equal to N and a number of fourth curves equal to M . . . mathematically filling the space of the surface plane defined by the first curves and the only one second curve." As another example, Claim 18 recites a computer readable medium comprising a software program operable to "convert the P x 1 surface condition into an N x M surface condition, an N x M surface condition being defined by a number of third curves equal to N and a number of fourth curves equal to M . . . mathematically filling the space of the surface plane defined by the first curves and the only one second curve." In the *Office Action*, the Examiner continues to rely on *Harada* for disclosure of Applicants' step of "converting the P x 1 surface condition." (*Office Action*, pages 11-12). Applicants have shown above with regard to Claim 1, however, that *Harada* does not disclose, teach, or suggest "convert[ing] the P x 1 surface condition into an N x M surface condition, an N x M surface condition being defined by a number of third curves equal to N and a number of fourth curves equal to M . . . mathematically filling the space of the surface plane defined by the first curves and the only one second curve."

Konno also does not cure the deficiencies discussed above. *Konno* discloses "a free-form surface generation method which smoothly joins two surface patches sharing a common boundary curve." (Column 2, lines 32-35). Specifically, *Konno* discloses "an interpolation method which applies the general boundary Gregory patch, and which generates a free-form surface which is joined smoothly to all the adjacent surfaces by creating the interior control points for smoothly joining the free-form surface with the adjacent surfaces along all the boundary curves." (Column 2, lines 36-42). Thus, *Konno* discloses generating a third surface (i.e., Gregory patch) to smoothly join two adjacent surfaces. *Konno* does not disclose, teach, or suggest "convert[ing] the P x 1 surface condition into an N x M surface condition, an N x M surface condition being defined by a number of third curves equal to N

and a number of fourth curves equal to M . . . mathematically filling the space of the surface plane defined by the first curves and the only one second curve."

Accordingly, for reasons analogous to those discussed above with regard to Claim 1 and because *Konno* does not cure the deficiencies of *Harada*, Applicants respectfully submit that independent Claims 12 and 18 are allowable over *Harada* and the proposed *Harada-Konno* combination. Applicants respectfully request reconsideration and allowance of independent Claims 12 and 18, together with Claims 14-17 and 19-23 that depend from Claims 12 and 18, respectively.

B.   The Proposed *Harada-Konno* Combination is Improper

Furthermore, Applicants respectfully submit that the Examiner has not provided the requisite teaching, suggestion, or motivation, either in the cited references or in the knowledge generally available to one of ordinary skill in the art at the time of Applicant's invention to modify or combine *Harada* with the disclosure of *Konno* in the manner the Examiner proposes. Applicant's claims are allowable for at least this additional reason.

1.   The Legal Standard

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed above, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention. Applicants respectfully submit that the Examiner has merely pieced together disjointed portions of references, with the benefit of hindsight using Applicant's claims as a blueprint, in an attempt to reconstruct Applicant's claims.

The governing Federal Circuit case law makes this strict legal standard clear.[2] According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* **Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so."** *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432 (emphasis added). *See also In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (**holding a prima facie case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine**); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at" the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. *See In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "**The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.**" M.P.E.P. § 2142 (emphasis added). The

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[2] Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

governing Federal Circuit cases are equally clear. "A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome *wherein that which only the invention taught is used against its teacher.*'" *In re Kotzab,* 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted; emphasis added). In *In re Kotzab,* the court noted that to prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. *See id.* *See also, e.g., Grain Processing Corp. v. American Maize-Products,* 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak,* the Federal Circuit reversed a finding of obviousness by the Board, *explaining that the required evidence of such a teaching, suggestion, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention*:

> Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.* Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted; emphasis added).

2.   The Analysis

With regard to dependent Claim 2 (and applicable to independent Claims 7, 12, and 18), the Examiner states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of *Harada et al.* to include generating at least one auxiliary curve that is substantially continuous with any adjoining surfaces of a surface having the P x 1 surface condition and compatible with the number of first curves and the only one second curve . . . thereby providing a free-form surface

generation method." (Office Action, pages 4-5). As motivation for doing so, the Examiner refers to several advantages purported to be provided by the free-form surface generation method of *Konno*. (Office Action, page 5). Thus, it appears that the Examiner has merely proposed alleged advantages for combining *Harada* with *Konno* (advantages which Applicants do not admit could even be achieved by combining these references in the manner the Examiner proposes). The Examiner has not pointed to any portions of the cited references, however, that would teach, suggest, or motivate one of ordinary skill in the art at the time of invention to incorporate the calculation of cross boundary derivatives on all the boundary curves forming a face as disclosed in *Konno* with the method for generating a fillet surface between two surfaces as disclosed in *Harada*. In other words, the alleged advantages of the systems, as provided by the Examiner, do not provide an explanation as to: (1) why it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention (***without using Applicant's claims as a guide***) to modify the particular techniques disclosed in *Harada* with the cited disclosure in *Konno*; (2) how one of ordinary skill in the art at the time of Applicant's invention would have actually done so; and (3) how doing so would purportedly meet the limitations of Applicant's claims in a successful manner. Indeed, if it were sufficient for Examiners to merely point to a purported advantage of one reference and conclude that it would have been obvious to combine of modify that reference with other references simply based on that advantage (which, as should be evident from the case law discussed above, it certainly is not), then virtually any two or more references would be combinable just based on the fact the one reference states an advantage of its system. Of course, as the Federal Circuit has made clear and as discussed above, that is not the law.

Accordingly, Applicants respectfully submit that the Examiner's conclusions set forth in the Office Action do not meet the requirements set forth in the M.P.E.P. and the governing Federal Circuit case law for demonstrating a *prima facie* case of obviousness. The Examiner's attempt to modify or combine *Harada* with *Konno* appears to constitute the type of impermissible hindsight reconstruction of Applicant's claims, using Applicant's claims as a blueprint, that is specifically prohibited by the M.P.E.P. and governing Federal Circuit cases. Applicants respectfully submit that the rejection must therefore be withdrawn.

For at least these reasons, Applicants respectfully request that the rejection of the Claims 2-23 be withdrawn and the claims allowed.

New Claim 24

New independent Claim 24 has been added and is fully supported by the original specification. No new matter has been added.

Independent Claim 24 of the present Application, as presented, recites:

> A method for interfacing with a surface within a computer-aided drawing environment, comprising:
>
> determining that a first surface of a drawing comprises a first plurality of curves constituting a P x 1 surface condition, a P x 1 surface condition being defined by a number of first curves equal to P and only one second curve, wherein P is an integer greater than zero;
>
> determining that a second surface of a drawing comprises a second plurality of curves constituting a first N x M surface condition, a first N x M surface condition being defined by a number of third curves equal to N and a number of fourth curves equal to M, wherein N and M are integers greater than one;
>
> converting the P x 1 surface condition of the first surface into a second N x M surface condition to match the N x M surface condition of the second surface, the second N x M surface condition being defined by a number of fifth curves equal to N and a number of sixth curves equal to M, wherein N and M are integers greater than one;
>
> constructing an N x M surface under the second N x M surface condition; and
>
> modifying the second N x M surface to edit a drawing.

Thus, Claim 1 recites the following combination of features: 1) determining that a first surface of a drawing constitutes a P x 1 surface condition, 2) determining that a second surface of a drawing constitutes a N x M surface condition, and 3) converting the P x 1 surface condition into a second N x M surface condition to match the N x M surface condition of the second surface. Applicants respectfully submit that the cited references do not disclose, either expressly or inherently, this combination of claim elements.[3]

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[3] "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. In addition, "[t]he identical invention must be shown in

As discussed above, *Harada* discloses "a method for generating a fillet surface which smoothly connects two surfaces to each other." (Column 2, lines 31-36). Specifically, *Harada* discloses "designating a spine curve near a boundary between the surfaces" and "generating a Gregory patch which approximately and parametrically represents the filler surface." (Column 21, lines 34-46). Thus, *Harada* discloses creating a third, fillet surface for connecting two adjacent surfaces. *Harada* does not disclose, teach, or suggest "converting the P x 1 surface condition of the first surface into a second N x M surface condition to match the N x M surface condition of the second surface," as recited in Applicants' independent Claim 24.

Likewise, *Konno* discloses generating a third surface two join two adjacent surfaces. As disclosed in *Konno*, a free-form surface generation method "smoothly joins two surface patches sharing a common boundary curve." (Column 2, lines 32-35). Specifically, *Konno* discloses "an interpolation method which applies the general boundary Gregory patch, and which generates a free-form surface which is joined smoothly to all the adjacent surfaces by creating the interior control points for smoothly joining the free-form surface with the adjacent surfaces along all the boundary curves." (Column 2, lines 36-42). Thus, *Konno* discloses generating a third surface (i.e., Gregory patch) to smoothly join two adjacent surfaces. *Konno* does not disclose, teach, or suggest "converting the P x 1 surface condition of the first surface into a second N x M surface condition to match the N x M surface condition of the second surface," as recited in Applicants' independent Claim 24.

For at least these reasons, Applicants respectfully request reconsideration and allowance of Claim 24.

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as complete detail as is contained in the . . . claims" and "[t]he elements <u>must</u> be arranged as required by the claim." *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); *In re Bond*, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); MPEP § 2131 (*emphasis added*).
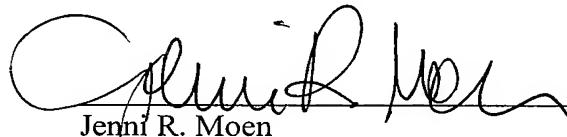
CONCLUSION

Applicants have made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other reasons clear and apparent, Applicants respectfully request reconsideration and allowance of the pending claims.

The Examiner is authorized to charge $260.00 to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P. for an additional independent claim. Although Applicants believe that no other fees are due, the Commissioner is hereby authorized to charge any additional fees or credits to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

If there are matters that can be discussed by telephone to advance prosecution of this application, Applicants invite the Examiner to contact its attorney at (214) 953-6809.

Respectfully submitted,

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Dated: May 15, 2008

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